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**Edited by E. Haldeman-Julius**

**726**

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# **Simple Facts About Venereal Diseases**

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## SIMPLE FACTS ABOUT VENEREAL DISEASES

### GONORRHEA

Probably more time has been spent in the study of gonorrhea in all its phases than almost any other disease. Long and tedious hours of laboratory work have been directed to the solution of the many problems it presents. The laity in general have but a slight conception of the extreme gravity of the disease, or the extent of the ravages caused by its inoculation into the system.

Gonorrhea is a specific catarrhal inflammation of the mucous membranes, and is caused by a microbe called the "Gonococcus of Neisser," which was discovered in 1879 by Neisser of Breslau. Since the date of this discovery, the diagnosis of the disease is reduced to an absolute certainty, as these micrococci are always present in the pus discharge of gonorrheal patients, but never anywhere else. The infection is nearly always due to impure intercourse, because the disease becomes localized in the sexual organs and is not disseminated through the blood; therefore it is not contracted from drinking cups, etc., as is the case with syphilis. In the male it affects the urethra, and in the female the vagina, urethra and cervix uteri. Or it may spread by extension into the testicles, seminal vesicles, bladder and prostate in the male; the uterus, Fallopian tubes, ovaries and peritoneum in the female. It is generally considered that a case of "clap" is not a matter of serious consequence, but specialists in venereal diseases have found by years of experience that the consequences are disastrous to the

health and happiness of the patient himself, and to his wife and children, should he marry. The germs may lie dormant in the tissues of the genitals for long periods of time, ready to be revived into activity after sexual excesses. It may remain slumbering for years, while the patient may be resting in the thought that a cure has been effected, only to break out into a series of attacks which are but recurrences of the original one. In the male the disease commonly causes a "stricture" of the urethra which leads to complications of the bladder, also kidney disturbances. Or it may result in swollen testicles, causing an inflammatory condition of the epididymus which eventually produces barrenness. Even the mildest cases of gonorrhea are liable to be followed by serious disorders.

But in woman its ravages are simply appalling, owing to the anatomical construction of the sexual organs. In addition to the disorders of bladder and kidney observed in the male, it produces inflammation of the vagina (vaginitis) and uterus, formation of pus in the Fallopian tubes and ovaries, and peritonitis. One or more of these conditions will often bring about a state of chronic invalidism or death.

The organism which causes gonorrhea is not always controllable by remedies, or if the injection method be used, it is frequently driven farther into the system, causing constitutional infection, gonorrheal rheumatism and other inflammation of joints and tendons, also diseases of the membraneous coverings of the brain and spinal cord, the heart, kidneys and large veins. While as a rule gonorrhea remains localized at the point of infection, yet the probabilities of it becoming systemic are great, and the mistake is often made of regarding this disease as trivial. Instead, it is a curse to mankind. It

has been known ever since history began. The literature of the ancient Greeks and Romans makes frequent reference to it. The Bible in various places gives regulations for those infected with "uncleanness" in their "issues," and it is without doubt one of the most frequent diseases with which the physician of modern times has to deal.

Within the past few years great progress has been made in the treatment of this disease and in the enlightenment of the public in regard to its seriousness. This is due to the more complete development of bacteriological science and advancement in microscopy. The great danger lies in considering a case cured when pus is no longer visible. Instead of being cured, it is often latent, and many times ruin is visited upon an innocent woman by a husband who was, perhaps, discharged as cured. So common is this disease among both sexes that it has been estimated that 75 per cent of the women who enter our hospitals today for operations do so as the result of some gonorrheal infection. Ricord, the great Parisian authority on venereal diseases, claims that eight hundred out of every thousand men in our large cities have at some time in their lives suffered with gonorrhea.

Venereal diseases are those which pertain to sexual love and intercourse, the name being taken from Venus, the Goddess of Love. In the same connection we use the word "Aphrodisiac," which refers to Aphrodite, the Greek patroness of lust. In the regime of venereal diseases are gonorrhea, syphilis and chancroid. Gonorrhea is seldom acquired in any other way than by intercourse, while the others are. Gonorrhea is often confused with urethritis, and while there is a similarity of symptoms, gonorrhea is more virulent and poisonous in

its nature, and is often referred to as "specific urethritis," the simple urethritis being a condition resembling the specific form. Gonorrhea does not taint the blood as syphilis does, but is for the most part a local disease; neither is it transmitted to posterity, the only hereditary condition being conjunctivitis in children born of gonorrheal parents. The gonococcus is one of the largest of the vegetable organisms, though very minute. Viewed under the microscope, it has a quick, rotary motion, always appearing in pairs, thence called "diplococci." They are biscuit-shaped, with their flat sides in apposition, and are always in small clusters or clumps. They multiply by division or cleavage, and in a very short time countless thousands are propagated, so that a single gonococcus deposited upon a mucous membrane will in a few hours produce countless numbers of the organism. The first one divides into two; these two produce four, and these four subdivide into eight, etc. Following their proliferation upon the tissues, a virulent inflammation is produced, and pus is formed and discharged from the affected parts. Diagnosis of a case of gonorrhea is comparatively easy when you have a history of impure intercourse followed by a discharge of pus, and this is absolutely verified if, upon microscopical examination, gonococci are found in the pus discharge.

Gonorrhea, like all infectious diseases, has a period of incubation, advance, persistence, decline and convalescence. The person who elects to acquire this disease has, of necessity, a certain road to travel, from which there is no escape, as it requires five to six weeks to effect a cure under the most favorable conditions. This can only be accomplished by a skilled physician, and when the disease is

taken in its incipency, and even then the reactive conditions, such as gonorrheal rheumatism and kindred disorders, nearly always remain. Let us assume, then, that a traveler has voluntarily undertaken this tedious journey of uncertain duration; he must, therefore, climb the mountains, scale the precipices, ford the rivers and cross the deserts with which his journey abounds. In fact there is very little that is pleasant to contemplate along his pathway. Retreat, however, is impossible, for he must encounter whatever may mark his course. The different stages of the disease are so many milestones, all of which must be passed to reach the green fields beyond. The ease or difficulty with which the traveler makes the journey depends upon his constitutional strength, the habits he has formed, his mental control, the skill of the physician, and the virulence of the attack. The outlook is certainly a dismal one, and the beautiful scenery which has delighted his senses has all disappeared. Perhaps the country beyond this hideous valley which he has entered is beautiful—perhaps not. He does not know. He only knows that if he ever reaches the beauties of Nature with which his native lands abounded, it will be by a superhuman effort. Let us observe him for a time, along the path of his dangerous journey.

He is a fine specimen of robust manhood, well poised and full of life and energy. His first step is to offer himself up at the shrine of Venus. His punishment may be any of the venereal diseases; but let us assume, for instance, that it is gonorrhea. Thenceforth his journey is in common with the coarse, vulgar and dissolute. He has lost confidence in himself and he is shamefaced. The gonococcus is planted either on the lips of the meatus or in the urethra. The first milestone on our

traveler's journey is reached. This is the stage of incubation, or the period intervening between the planting of the microbe and the time of its manifestation. This occupies from two to fourteen days, according to the susceptibility of the patient and the duration of the impure intercourse. The usual time, however, is three days. The mucous membrane is a favorable soil for the growth of the gonococci and they develop rapidly and spread up the urethra. At the onset of the disease, the system undergoes a series of mild symptoms, such as rise of temperature, loss of appetite and mental depression, though the disease, generally speaking, is a local one. There is usually mental anguish caused by a dread of gonorrhea which accentuates the symptoms, also a greatly increased sexual desire with painful erections. Among the early symptoms are a reddening of the lips of the meatus with a tickling sensation at the orifice. This is followed by a sticky exudate which causes an intense burning, increased upon urination. These symptoms last from two to eight days, then the acute stage begins with all the symptoms of inflammation,—heat, pain, redness, swelling, etc. The exudate now changes from a sticky substance to a creamy pus, the redness and swelling extend,—sometimes involve the whole of the penis and the organ becomes extremely painful. The lymph glands in the groins now begin to swell and are painful. At the beginning of the second week the discharge becomes more purulent and pours from the urethra in large drops day and night. The inflammation spreads down the urinary passage, the swelling and pain increase and the general feeling of discomfort is absorbing his attention. The urinary canal, or urethra, is a small passage which serves to convey the semen and urine to the exterior. In health it

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is about the size of a common lead pencil, though when the walls become swollen, the natural consequence is a narrowing of the passage. Urination is now a matter of extreme agony, the pain being so intense in some instances that a spasmodic contraction of the muscles will stop the flow of urine so that it is necessary to pass a catheter before relief can be obtained. In any event the stream of urine becomes much thinner and is voided with greater difficulty, in some instances being stained with blood.

The pus discharge is apparently less during the day, on account of the more frequent urinations. During the inflammatory stage, the patient should be kept in bed as much as possible, as moving about is a source of irritation. During the second week the acute stage reaches its climax. The urethra becomes more swollen and inflamed and the pain is reflected to the testicles and perineum, and when the patient sits down, he does so with the greatest care. During the acute stage he is in absolute torture. His temperature increases, his sexual desire is often uncontrollable, so that he often resorts to masturbation or visits some house of prostitution, thus spreading this fearful and loathsome contagion. Now the sexual irritation amounts to a positive agony. The penis becomes distorted, the erections are very pronounced, in some cases lasting hours at a time, and producing a condition known as "chordee," in which the penis is rigid and bent like a bow. There is no relief night or day, though it is more pronounced at night, as it is aggravated by the warmth of the bed. Cold applications at this stage are a source of great relief, yet this relief is only temporary and he awakens in the morning tired, dejected, hollow-eyed, and unfit for the duties of the day. There is sometimes a greenish discharge which becomes more and more profuse.

The foregoing description represents a typical case of gonorrhea of the anterior urethra up to the acute stage. Of course, every case does not run just the same. Conditions are greatly modified by proper treatment, such as hygienic surroundings, rest, diet, etc. Then if it extends to the posterior urethra, the results are much more complicated. At the end of the third week the symptoms will begin to disappear if it has not spread to the posterior urethra. The greenish discharge grows less, becomes more glue-like and sticks everything together that it touches. This is the declining stage and marks the third milestone of our traveler's journey. This stage is apt to be interrupted by relapses if the patient becomes constipated, indulges in alcoholic drinks or catches cold. The severity of the disease is extremely variable. Sometimes there is a little discomfort and the discharge of pus is so slight that it is scarcely noticeable, while in other cases all of the distressing symptoms may be present with the liability of its terminating in gonorrheal rheumatism, conjunctivitis or gonorrheal inflammation of the brain or heart, ending in death.

At various intervals during the progress of the disease, the urine should be tested to determine the presence of gonococci. These usually are seen under the microscope in large numbers when the disease is at its height, but gradually diminish until they disappear entirely. The pus-cells, however, may remain in the urine for years afterward, and during all of this time are liable to spread the disease to anyone with whom he may have intercourse. Here is where the great danger of the disease lies. The physician who is unskilled in treating this class of patients will discharge him as cured at this stage, as there is no outward sign of the dis-

ease. But as a matter of fact he is far from cured, as the microbe is very liable to be lurking in the glands of the urethra. Then again, the infection may have spread to the posterior urethra and all signs of the disease in the anterior canal may have disappeared, only to become more deeply seated. Instead of the pus being discharged through the anterior urethra, it is sent backward into the bladder. This causes an intense burning pain between the testicles and in the perineum and an increased desire to urinate without being able to do so. Or, if he succeeds in voiding a small amount of urine, he experiences no relief. The injection method employed by many physicians often sends the poison into the deeper structures and the patient thinks himself cured, and when the disease again manifests itself, he is laboring under the impression that it is another attack, when in reality it is the same old condition coming to the surface.

Recovery from this form is very slow and often terminates in stricture, epididymitis and inflammation of the various parts. Stricture may be relieved by an operation in many cases, but inflammation of the epididymus, or epididymitis, causes sterility of the testicle involved, or absolute sterility if both are involved.

The prognosis of a case of gonorrhea is even more upon the conduct of the patient than upon the skill of the physician. When it is taken into consideration that the sexual appetite in some of these cases is extremely strong and passionate, and the patient has fallen into habits of living and thinking which are a constant drawback to his progress, the outlook is not favorable, and the wise physician is guarded in his statements as to the chances of recovery. As a rule, they are a very undesirable class of cases. In the first place,

they are not willing to aid the physician by living a sanitary and temperate life and seek to throw all of the burden of responsibility upon him. Then they do not obtain medical assistance until the disease has progressed to such a stage as to render a cure very uncertain. Many, too, become discouraged at the length of time required to effect a cure, being either unwilling or unable to stand the expense.

Gonorrhea is a self-limited disease and requires a certain length of time, the same as it requires about six weeks for the building up and repair of a broken bone, however skillful the surgeon may be. In the treatment of gonorrhea, it is important that the patient early understand that his ailment is extremely serious; that the discharge is a virulent poison, and that he cannot exercise too much care in handling his towels, bed linen, and the dressings on the penis. His hands should always be carefully washed after handling these parts so that his eyes may not become contaminated, nor the disease transmitted to others.

Chronic gonorrhea, or gleet, is developed from an acute attack in all cases, and among the factors which convert an acute attack into a chronic gonorrhea may be mentioned the following:

(a) Indiscretions on the part of the patient in diet, over-exercise, drinking and sexual indulgence when he thinks himself cured. The discharge having ceased from the anterior urethra, the patient, as well as the physician, often labors under the delusion that a cure has been effected, when as a matter of fact, the discharge is pouring into the bladder instead of out at the meatus.

(b) When the declining stage of an acute attack is obstinate and does not yield readily to treatment, the inflammation becomes local-

ized in the bulbous, membranous or prostatic portions of the urethra.

(c) A series of rapidly recurring relapses tends to implant the gonococci more firmly into the system, resulting in an extensive damage to the tissues, which later produces cicatricial tissue, then stricture.

It therefore follows, that men frequently suffer from chronic gonorrhea without being aware of it, on account of the absence of a discharge, which is the only symptom by which many are able to recognize it. The symptoms in some cases show a frequent desire to urinate attended with a sharp pain. There is also a decided uneasiness in the perineum, testicles or rectum. In other cases, the sexual organs are disturbed. During intercourse there will be premature emissions without the orgasm and a loss of sexual power. Many times there will be emissions during the act of defecation or urination. This condition would undoubtedly bring about impotence and sterility. As the nerve center which controls the sexual functions is in the spinal cord, paralysis or hyperesthesia of certain muscles is not an infrequent outcome. In all disturbances of the sexual organs in the male, the tendency is for the patient to become depressed and gloomy. If he is impotent, he feels himself only half a man. He often imagines himself impotent even if he is not, and this imagination is apt to produce the very condition he fears. In these cases, suggestion is the most powerful remedy that could be applied. Try to impress upon him how much better off he is than many others, and by repeated suggestions restore the confidence of your patient in himself and the battle is more than half won. Then establish the habit of autosuggestion in him, and he has not only the key to this condition in his own

hands, but many others. Suggestion is a powerful weapon of self-defense in the hands of him who has learned to wield it.

If the neurasthenic symptoms spread farther, other spinal irritations are manifested, especially in the lumbosacral region. Then we have more pronounced neurasthenic conditions accompanied by neuralgias and paralgias, indigestion and a catarrhal condition of the alimentary canal. By this time the mental depression has become so extreme that it is bordering on mania, and not a few terminate their existence by suicide.

After gonorrhea has once become thoroughly established in the system, only the physician skilled in bacteriology and microscopy is competent to decide when the patient is not a menace to society. The finding of gonococci in a case of chronic gonorrhea, verifies the disease as gonorrhea, but the failure to find them does not by any means demonstrate that gonorrhea is not present, as the germ may have become lodged in the crypts and follicles of the glands, and appear at the surface only upon irritation. Therefore, the plan adopted by some physicians of artificial irritation is a safe one. For instance, an irritating injection is thrown into the urethra. This causes the gonococci to become dislodged from their hiding places if they are in the tissues and sets up a simple urethritis with suppuration. Then if the pus discharge is found upon examination to contain no gonococci, the patient may marry. If, however, they are found to be present, he should under no circumstances marry until they cannot be made to reappear. Then having stood this test and having been pronounced free from gonorrhea has a cure been effected? Not by any means. The scar tissue which has formed as a result of the inflammatory condition of the

tissues nearly always results in stricture, or a narrowing of the urinary passage. Therefore, for several months after the patient has been pronounced free from gonorrhea, he should present himself frequently to his physician for the passage of "sounds" in order that the calibre of the urethra may not become narrowed. Strictures may develop, according to some authors, many years after a cure has been effected. If a man is in the prime of life, his tissues resist disease, but when he begins to go down-hill, the tissues which possess the least resistive power are the ones to suffer. So, if in his youth a man has suffered from a severe attack of gonorrhea, his declining years may mark the appearance of a stricture in the tissues which have heretofore been the seat of inflammation. This is a natural law and applies in other diseases as well as in gonorrhea. In fact, it has been stated by scientific experts that tissues which have once been the seat of a profound disturbance, never fully recuperate; that there is a weakened resistance which always remains, rendering these tissues always liable to future morbid processes.

We have, then, in the male as the sequelae to gonorrhea, inflammation of the various surrounding parts, e. g., the prostate gland, seminal vesicles, penis, prepuce, etc., and last but not least, stricture and epididymitis. The two latter are the most common complications.

And so we would ask the young man who is starting out in life, and who, perchance, has followed with us the course of this dread disease and marked its ravages,—was it worth the while?

*Stricture*—Stricture is, doubtless, the most important of the morbid processes resulting from gonorrhea. It is characterized by a narrowing of the urinary canal, and may be caused

by a contraction of the muscular fibres which compose the walls of the urethra; by a fibrous outgrowth and thickening of the urethral walls reducing the calibre; by the formation of scar-tissue which contracts and draws the walls partially or wholly together, thus obstructing the passage of urine or semen, or by irritating injections used in an attempt to abort gonorrhea. The natural consequences would be a retention of urine in the system, or the establishment of false canals, or fistulae, should the canal become entirely impervious. These fistulae always burrow in the direction of least resistance and may find an exit in different portions of the penis, scrotum or abdomen, according to the resistive powers of the tissues.

Stricture occurs only in the anterior urethra, or the bulbous portion, though inflammation resulting from this lesion may spread to the membranous and prostatic portions, extending in many cases to the neck of the bladder. During the period these fistulae are being formed, there being no opening through which the urine can escape, it must of necessity find its way back into the system, the result of which would be uremic poisoning. Of course where the canal is only partially closed, the greater part is excreted through the natural passage, but it is voided with such extreme difficulty that more or less finds its way back into the system, causing mild forms of uremic poisoning, dropsy, rheumatism, etc. It usually requires several years for the development of a stricture, and when once established, the urethra is never again in perfect order. It must be kept open with "sounds" for years, and in many cases, for life.

It is much the same with stricture as with other disease, i. e., if arrested in its incipency

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it is more easily controlled than if allowed to take care of itself. In its earlier stages it is soft and yielding, becoming more fibrous in character as the condition progresses, until finally a firm mass of dense scar-tissue is formed. This tissue is inelastic and hard, and bears no resemblance whatever to the original and normal structure. It may remain in the soft state for years if the patient is temperate in his habits and moderate in sexual indulgence; however, it always has a tendency to become fibrous and to contract.

The first symptom of stricture might easily exist without being observed by the patient. It consists of a mucopurulent discharge from the meatus at intervals through the day and morning. Then the stream of urine becomes smaller in volume, or it may be voided in separate jets or streams. After it is farther advanced there will be an almost constant escape of urine, owing to the tissues having become inelastic, thus preventing the natural recoil of the structures. In other words, the urethra becomes a rigid tube which remains more or less open at all times.

It usually becomes more and more difficult to expel the urine, and the act is accompanied with tenesmus. The flow will frequently stop entirely before the bladder has been emptied. Then comes the alarming symptom of retention of urine, which has a vast army of complications in its train, the very life of the patient being threatened.

The opposite extreme is "incontinence of urine" in which the patient is unable to retain his urine. This is caused by a condition previously mentioned, i. e., rigidity of the passage owing to a fibrous outgrowth of tissue; also to paralysis of the sphincter muscle at the neck

of the bladder and the compressor urethrae muscles, their function being to keep the urethra closed until by a voluntary effort on the part of the individual, it opens. This is a most offensive condition, the patient always having a urinous odor. The bladder never being entirely emptied of urine, it becomes foul and causes inflammatory conditions in both bladder and kidneys, in fact along the entire urinary tract.

Obstruction of the canal also causes extravasation of decomposed urine into the tissues, which causes necrosis and gangrene of all the tissues with which it comes in contact, also blood poisoning and abscesses. There is also grave danger of uremic convulsions and death if relief is not promptly obtained. Inflammation of the prostate gland often develops as a result of stricture. The enlarged prostate presses upon the urethra, sometimes completely closing it. If pus is developed, abscess of the prostate results, and pouches filled with stagnant and putrid urine are formed. As these sacs become more distended, the walls become thinner and thinner, until finally they rupture into the abdominal cavity, causing peritonitis and death.

The main cause of stricture is chronic gonorrhea which has lasted for a long time. It matters not if it was a mild attack, as the length of time it has lasted is a more potent factor in its ethiology than its severity. Stricture may also result from syphilis and masturbation, caused from an inflammation of the mucous membrane of the urethra. The main point to remember in its causation, therefore, is, that a very mild case of clap is liable to cause stricture unless thoroughly and promptly treated, and that the duration of the attack

has a more powerful influence in the formation of a stricture than the severity of the acute stage. Another point which is frequently overlooked is, that strictures develop very slowly. A young man, for instance, has been effectively cured, let us say, of an attack of gonorrhea. He congratulates himself upon his escape, then dismisses it from his mind as an episode of the past. A number of years later he begins to notice a little difficulty in voiding urine. It becomes more and more pronounced, but this condition is never for a moment associated in his mind with the attack of gonorrhea of former years, and he never for a moment thinks that it can be the outcome, yet it is even so. If, then, some of these danger points may come under the observation of only a few who can apply it with benefit to themselves, the author will consider that his work has not been entirely in vain.

*Epididymitis*.—Perhaps the most frequent of all the complications of gonorrhea is epididymitis, or inflammation of the epididymis, or the convoluted tubule attached to the upper portion of each testicle. Associated closely with this condition is orchitis, or inflammation of the testicle itself, though it is not nearly as common as epididymitis. Both affections, however, cause a swelling of the testicles, but in reality the epididymitis is more often at fault than the testicles.

Perhaps a short anatomical review of these parts will not be out of place in this connection, so that the reader may grasp the significance of some of the terms which must be used in dealing with this subject.

The scrotum is the pendulous bag in which the testicles are suspended by the spermatic cord. There are numerous semen-producing

glands within the testicles and many ducts or tubules which convey it on its onward course, all of which are of vital importance in procreation. The semen and spermatozoa are manufactured in the testicles by these glands, after which it is conveyed to the epididymis, a long, convoluted tubule folded upon itself many times, and attached to the upper part of the testicle. In its various convolutions it forms two bodies, called the globus major and globus minor. The epididymis, if straightened out, would measure twenty feet in length. After leaving the epididymis, the semen is poured into the vas deferens, a large tubule and no longer convoluted, which carries it to the seminal vesicles, thence into the ejaculatory ducts and into the urethra. Thus we can see how an obstruction in one of these minute ducts would prevent the onward flow of semen and cause sterility. It will also be easily understood how a gonorrheal affection of the anterior urethra may extend to the posterior portion, thence backward to the bladder, seminal vesicles, vas deferens, epididymis and testicles. The epididymis seems to be the part especially marked out for the ravages of gonococci, causing an intense irritation of this delicate tubule, which results in inflammation with all its phenomena, e. g., pain, heat, redness and swelling. Then comes the outgrowth of fibrous tissue resulting from the inflammation, causing a knotted or lumpy condition, which can be easily felt by palpation. This constitutes a positive obstruction to the flow of semen, and if the same condition exists in both epididymes, then the patient has lost the power of reproduction and is henceforth a neuter. Owing to the minuteness and ex-

treme delicacy of these little tubules, there is no hope of a cure.

As epididymitis is a complication of posterior urethritis, it naturally does not develop at once, and not usually until several weeks after the acute stage. There are instances, however, where no symptoms are seen for several years. The usual symptom at the onset is a very severe pain in the testicle involved, followed by fever, chills, constipation and a general systemic reaction. The patient soon seeks a recumbent posture, as the pedulous weight of the testicles in the scrotum is unbearable. In some cases the inflammation affects the vas deferens, and not infrequently it extends to the inner lining of the scrotum (*tunica vaginalis*), causing a serous effusion, called "hydrocele." It is then necessary to resort to the operation of "tapping" to remove the excess of fluid. These changes usually occupy a period of five to ten days, modified, of course, by efficient treatment.

If the seminiferous tubules become thoroughly sealed, the affected side is sterile, while if both sides are involved, complete sterility is the result. Intercourse may be as thoroughly enjoyable as ever and will be accompanied by a discharge of semen, yet the spermatozoa, or life-producing element, will be absent. If the vas deferens has been the seat of inflammation, it can be traced as a firm, dense cord, and the epididymis itself will be knotted or lumpy, and permanently sealed by scar-tissue.

*Chronic Hydrocele.*—One of the reactive influences of epididymitis is chronic hydrocele. This is an extremely distressing condition, as the sufferer is subject to frequent attacks of neuralgic pains in the testicles which are often agonizing in intensity. His nights are sleep-

less, he becomes nervous and excitable, dyspeptic, emaciated and profoundly depressed in spirits. All men especially prize the integrity of their sexual organs and any damage to them reduces him to the depths of despair. This is such a strong characteristic of the male sex that even if the condition is imaginary, he will dwell upon it until his whole system is depleted and neurasthenic.

*Prostatitis.*—Prostatitis, or inflammation of the prostate gland, is a rather common reaction of gonorrhea, though not as common as the two previously discussed. This gland is located around the neck of the bladder at the beginning of the urethra, which it completely surrounds. It is composed of three lobes, one on either side of the urethra, and one in the center, and is pierced by three ducts, the urethra perforating it above, and an ejaculatory duct on each side. This organ is intimately connected with the sympathetic nervous system, and is correspondingly sensitive. The anatomical location of this gland renders it susceptible to the invasion of gonococci from the anterior urethra. Prostatitis may also result from external injury, riding on an improper saddle, or the virus from gonorrhea may be carried by "sounds" or a catheter introduced into the passage of the prostate.

The initial symptoms are a dull pain and sensation of weight in the perineum and a frequent desire to urinate. There is also a sensation of fullness in the rectum and the patient makes frequent attempts to void urine and feces without success, and the acts are accompanied by tenesmus of both bladder and rectum. This is caused by the enlarged prostate pressing upon the neck of the bladder and rectum, and in some cases both of these ave-

nues of excretion will be entirely blocked, making it necessary to employ the catheter and colonic flushings. These conditions may be aggravated by an intense sexual excitability, accompanied by erections and pollutions. The seat of sexual desire in the male is the veru montanum, a rounded eminence situated on the floor of the prostatic portion of the urethra, and when it becomes irritated or inflamed the sexual desire is stimulated.

This is a very painful and distressing affliction and if the patient is not restrained from venereal excesses the prognosis is very serious, as the retention of poisoned fæces and urine is an inevitable outcome. Abscess formation is also liable to take place, and if not operated upon at the proper time, fistulae are established where pus and urine find an outlet.

The damage to the urinary tract in this disease is permanent, especially if there has been an abscess formation, when the prostate gland becomes a mass of indurated scar-tissue. Circumcision in all venereal diseases should be early advised, as a loose foreskin affords a hiding place for germs and smegma.

*The Effects of Venereal Diseases Upon the Female Generative Organs.*—From the foregoing pages something of an idea can be formed as to the effects of venereal diseases upon the male generative organs, but these can in no way be compared with its results upon the female organs of reproduction. They are not only more complex from an anatomical standpoint, but they are far less accessible than those of the male, and these diseases are often well advanced before marked symptoms present themselves. After puberty nearly all women have at least a slight discharge from the genitals, usually of a leucorrhœal nature, and little

attention is paid to a slight increase which might be the result of catching cold. Thus the disease may find its way up the vagina, and into the uterus, tubes and ovaries before the patient is aware of its presence. When it becomes once seated in the tubes and ovaries, irreparable damage and life-long suffering is the inevitable result.

From the observations of Ricord, of Paris, eight hundred out of every thousand men in large cities have had gonorrhea, and in spite of their apparent recovery it remains latent in their systems in most cases for life. It has also been estimated that ninety per cent of women who marry these men suffer from some form of gonorrhea, and latent gonorrhea in the female manifests itself in the form of ovaritis (inflammation of the ovaries), endometritis (inflammation of the lining of the uterus), perimetritis (inflammation of the tissue surrounding the uterus) and a vast number of other inflammations. This, as is easily seen, is the cause of many cases of sterility in women. It would not do for a physician to call this gonorrhea. It is usually called by another name which sounds more in keeping, perhaps, with their position in life. If she has contracted it innocently from her husband, she, of course, is not informed of the fact by either the husband or family physician. Previous to the discovery of the gonococcus by Neisser, the prevalence of gonorrhea in women was not appreciated, but the finding of the germ in so-called ovaritis or peritonitis renders the diagnosis positive, and we are able to trace the majority of the diseases of women, such as uterine displacements, fibroids, cancers, and polypi, to gonorrhea. In addition to not being able to recognize the disease, its ravages in the internal sexual organs were

entirely underestimated. As the Fallopian tubes communicate with the abdominal cavity, infection in one is easily communicated to the other. Gonorrhea is also more liable to become chronic in women and lead to destructive changes, and with each recurrence of menstruation there is a renewed activity and further spread of the virus.

Let us suppose, for instance, that a man contracts gonorrhea. He promptly calls upon his physician, who takes his case in hand, no expense or pains being spared to insure a speedy cure. He takes a "vacation" and goes to Hot Springs or some other health resort, where he can thoroughly rest and avail himself of all the sanitary and hygienic conditions needful. After a time, all discharge and evidence of the disease disappear. He returns home, receives the congratulations of his friends upon his healthy, rugged appearance and is discharged by his physician as cured. His absence is a matter of such common occurrence that not much notice is taken of it, in fact, he is rather envied by his associates, who, perhaps, do not feel that they can afford a vacation. Time passes on and five or ten years elapse. The young man profited by his experience of former years and has not since contracted gonorrhea and the episode has been almost, if not entirely, forgotten by him. He is a fine specimen of manly vigor, and soon becomes enamored of a pure and healthy woman, whom he marries. It would be hard for the casual observer to tell which was the most to be congratulated as they depart on their honeymoon, so full of radiant health and life are they. But soon the wife begins to fade, and as it is too early to look for pregnancy, the cause is a source of deep solicitude to her husband and friends. The symptoms

grow more grave, pains set in and she can barely perform the simplest duties. Professional advice is sought. The diagnosis of the physician is,—a cyst of the ovary, formation of pus in the Fallopian tubes (salpingitis), or some equally dangerous condition. An operation is advised in order to save her life. Supposing her condition to be double salpingitis, both tubes are therefore removed. If she survives the operation, she is sterile for life. A section of the tube is placed under the microscope and gonococci are shown in large numbers! A few months before, she was a strong, healthy woman, as chaste and pure as the morning; now she is a wreck of her former self, unsexed and physically destroyed. What a dismal, dreary future awaits her! But this is only one case we have just cited,—only one of the many who anticipate their coming wedding with all the joy and exuberance of youth; whose skies are cloudless and whose pathway is strewn with sweet-scented flowers. They contract conditions which alter their lives and characters. They have headaches, backaches, leucorrhea, lassitude, hysteria, and a host of other common ailments which are never associated with gonorrhea by the mass of humanity, but which are, nevertheless, the results of latent gonorrhea contracted either from the husband or lover.

If the disease could be discovered in its inception a great deal of suffering would be saved, but the physician seldom sees the earlier stages of the disease, and by the time they fall into his hands they are miserable, suffering wrecks of humanity with scarcely a vestige of their former selves remaining.

The female urethra is more frequently infected than any other part. The period of incubation and symptoms are the same as in the

male, the same greenish-yellow discharge of pus and burning sensation upon urinating. The urethra in women is a tube about two and one-half inches long and straight, so that infection is easily conveyed its entire length and into the bladder. This is one of the reasons why gonorrhea is a more serious thing in women than in men, because as soon as it reaches the bladder all of the symptoms are intensified. The frequent urination and the scalding of the tissues upon which it falls is almost unbearable. Then again, from the bladder it rapidly spreads up the ureters and to the kidneys, which means invalidism and death.

The vagina is also a frequent seat of infection, the discharge being the same in character as from the urethra; sometimes being so slight as not to be noticeable, and at others extremely irritating and painful. Gonorrheal vaginitis is, perhaps, the most common of the gonorrheal infections in prostitutes, as it is safe to say that practically all of them contract it sooner or later.

We can scarcely over-estimate the gravity of the results when this infection reaches the internal female sexual organs, as it is almost sure to do unless treatment be prompt and effective. As soon as the tubes, ovaries and peritoneum are involved, the case passes from the hands of the physician to the surgeon, who, however skillful he may be, can only remove the diseased organs. If she survives this ordeal she is often mentally weak and is unsexed for life.

The most prominent reactive influence of gonorrhea is sterility, while the effects of syphilis are to cause abortions. Here again is Nature kindly in protecting future generations from the disease to a very large ex-

tent. Wives of gonococci-bearing men may enjoy fairly good health until the first pregnancy, after which they are liable to become sterile. Parturition has a tendency to disseminate the disease throughout the reproductive organs. After this, one child may be born, but scarcely more, and in many cases the exudate that is thrown out causes sterility very early in married life.

The women of France are notably sterile. The commission appointed to study this question reported as follows:

"Twenty-four per cent of all French marriages are marked with complete sterility.

"Twenty per cent more never had more than one child."

In sterile marriages the blame is very apt to be placed upon the wife, while in reality the husband is usually the cause of her sterility or is himself unable to procreate.

*Gonorrheal Rheumatism.*—Gonorrheal rheumatism is a septic infection, and is caused by the germs entering the blood stream and being carried to various parts of the body, usually settling in the joints. The knee-joint is the one most commonly involved, then the ankle, hip, wrist-joints, etc. It causes supuration, and the sticky exudate disposes itself around the ends of the bones and glues them together. This stiffening is called "ankylosis," and if allowed to remain inactive is liable to become permanently stiffened. The only hope of the patient in these cases, therefore, lies in active and passive movements of the joints to prevent the ends of the bones from coalescing. Drugs are very unsatisfactory, as none have yet been discovered which will act as a true germicide without destroying the tissues.

*Ophthalmia Neonatorum.*—Another terrible

and frequent gonorrheal infection is the inoculation of the eyes of new-born infants during their delivery through the maternal channels. This disease is called "ophthalmia neonatorum." With proper care, however, the infant's eyes may be saved from permanent contamination by the injection of silver nitrate into both eyes immediately after birth. With this means of prevention, which is always accessible, it is a great reproach to the attendant upon obstetrical cases whether it be a midwife, physician or nurse, if this means is not uniformly employed to save the eyesight of children of gonorrheal parents.

This somewhat lengthy discussion of gonorrhea and its effects upon the male and female sexual organs, has seemed necessary owing to the erroneous idea which prevails that it is of slight consequence. Let us hope, however, that with the progress of modern medical science, and the enlightenment of the people in regard to the gravity of the venereal diseases, there will be a corresponding increase in the precautionary measures taken to prevent the inoculation into the system.

### CHANCROID

Until recent years, chancroid and syphilis have been erroneously confused, but as a matter of fact they are distinct and separate diseases, their characteristics being quite opposite.

Chancroid or "soft chancre" is an entirely local affection and is not transmissible to other parts of the body by the blood, neither is it hereditary. It is called "soft chancre" in contradiction to the hard chancre of syphilis. Pus from the primary lesion may be inoculated into other parts of the body where there is an abrasion, so that unless extreme caution is

used, the patient can infect and reinfect himself. This is not the case with syphilis, one attack rendering the patient immune from self-inoculation, as well as from contracting the disease from others. Extreme sanitary precautions should always be used to prevent spread of the disease by means of drinking cups, towels, etc.

Chancroid is invariably produced by inoculation from another chancroid, according to the latest authorities, though it was formerly supposed to have been produced also by habits of uncleanness.

Soft chancre has no period of incubation, but an ulcer may develop in twenty-four hours after the deposit of the organism upon the abraded spot. The primary sore is usually on the head of the penis and on the prepuce. The lesion differs from syphilis, in that it is soft and has sharply defined edges. Syphilis predisposes to chancroids, although, as above stated, they are distinct affections.

In severe cases of chancroid there is extreme erosion of tissue which may cause great deformity, such as destruction of the penis or scrotum, or laying bare of the testicles. These conditions, however, seldom occur except when there is an extreme depletion of the system such as is caused by syphilis, diabetes, tuberculosis, or some equally poisonous condition of the blood.

The most frequent reactive influence of chancroid is bubo, or a glandular swelling. Supposing the lesion to be on the external genitals, the poison is conveyed by the lymphatics to the groins, these being the glands nearest the lesion.

The cause of bubo is, that at the point of the lesion, the bacilli throw out a poisonous sub-

stance which acts as a chemical irritant upon the tissues. This is carried by the lymph stream to the nearest glands, inflammation follows as a result of the irritation, and the tissues at this point become indurated. All of this time there is a fierce battle being waged between the leukocytes and the bacilli, and when the inflammatory area breaks down into pus and infiltrates the surrounding tissues, this is an indication that the leukocytes or white blood cells have been defeated in their efforts to check the progress of the microbes and have been slain in the battle.

In the majority of cases, circumcision is all that is necessary in the treatment of chancroid. Mild cases heal without surgical operation if especial care is exercised in cleanliness of the parts and due attention paid to sanative treatment in the matter of diet, baths and antiseptics.

### ACUTE HYDROCELE

This condition is usually a sequel to epididymitis, being an extension of inflammation from the epididymis to the serous envelope which lines the interior of the scrotum.—the tunica vaginalis. The inflammatory condition causes this membrane to pour out a serous effusion which greatly distends the affected compartment and results in an edematous swelling of the entire scrotum.

Hydrocele may also be caused by traumatism, orchitis or irritating injections given with the intention of checking the progress of gonorrhea.

The general constitutional symptoms are, as a rule, slight. The local pain is sometimes very severe because of the extreme tension resulting from pressure of the hydrocele fluid,

which will remain there indefinitely before being absorbed unless drawn off by the surgical operation of "tapping." The changes described usually develop in from two to five days, and gradually subside in a few days. The most important diagnostic sign is the translucency of the fluctuating tumor formed in the scrotum, which can be ascertained by applying one end of a tube to the scrotum and looking through the other, while a bright light is placed against the scrotum on the opposite side of the tumor. There are various other methods of making this examination, but the one outlined above is, perhaps, the most practical and effective.

A complete cure of hydrocele is rare. After the effusion has been aspirated, what little remains or collects afterwards, is absorbed. The patient suffers no pain or inconvenience and thinks himself cured. However, there is almost invariably an induration in the epididymis which may only be about the size of a pea, yet it is sufficient to cause sterility of this testicle. Semen will be ejaculated at copulation, but it will not contain spermatozoa, the essential element for impregnation of the ovum. With each gonorrheal infection there is an increased risk of sterility. The testicles may break down into pus and form an abscess, thus causing a serious deformity, as the scrotum is usually destroyed also. A syphilitic taint in the blood aids a condition of this kind and it attacks the tissues with great intensity. Testicular neuralgia often remains for a long time after an attack of this nature causing insomnia, nervous excitability, and profound depression of spirits. There is no part of a man's anatomy which he prizes as highly as the integrity of his testicles, and any damage to them

produces such a depth of depression as to cause a reaction on the entire nervous system.

Chronic hydrocele is usually secondary to diseases of the epididymis, though it may be due to a venous stasis caused by an ill-fitting truss, or in other cases may be caused by irritating loose bodies sometimes found within the sac, which set up the inflammation which gives rise to the abnormal secretion of fluid. Chronic hydrocele may begin in the acute form, the fluid gradually increasing in quantity, the first indication being an increase in the size of the scrotum. It has been stated that the characteristic effusion of hydrocele begins without any irritating influences, the causes which predispose to its production being the pendant position, lack of vascular tone, tendency to venous congestion by renal or hepatic disturbances, and the approach of middle life, at which time the resistance is weakened.

Symptoms of the chronic type are wanting, except the weight and size of the tumor, which is tense and fluctuating. It begins at the lower portion of the scrotum and grows upward.

The light test should be employed in diagnosis, the same as in the acute form. The differential diagnosis from hernia is quite simple, inasmuch as in hernia there is an impulse on coughing, the tumor hangs down instead of protruding forward, disappears at night and is first noticed in the groin, gradually reaching the scrotum. When the tunic of the hydrocele is thickened or opaque, it is difficult to distinguish it from hæmatocele, otherwise the absence of translucency and the more rapid growth of the swelling will aid in diagnosis. The same conditions render the diagnosis from a tumor almost impossible, although a tumor is much heavier, has a marked

dilatation of the vessels of the cord and scrotum and an enlargement of the lumbar and sacral lymphatic glands.

Hydrocele is not dangerous to life, though it predisposes to hernia. In children a spontaneous cure is common; in adults a complete cure is seldom effected.

### VARICOCELE

Varicocele is an enlargement of the veins of the scrotum and spermatic cord, or the corresponding veins in the female. Its most frequent occurrence is in the male from about the fifteenth to the twenty-fifth year.

The veins of the cord are especially susceptible to dilatation from the fact that their valves are insufficient, making a very long column of blood to be supported. The left testicle is usually affected because the venous blood on this side empties into the renal vein at right angles instead of passing obliquely into the vena cava as it does on the right side. This causes a partial stasis of the blood in this situation, producing the varicose veins.

The causes which contribute to the development of varicocele are very violent muscular exertion, prolonged standing or walking, sexual excesses, masturbation, inflammation, gonorrhea, tumors in the abdominal cavity and involvement of the lumbar lymphatic glands or kidneys.

The symptoms may be direct or reflex. The direct are as follows: The veins in the affected side are very greatly dilated and tortuous which can be easily detected upon palpation. This condition disappears upon lying down, but reappears upon assuming an erect position. The scrotum is dark blue or purple and elongated on the affected side.

The reflex symptoms are pain in the testicles, penis and in the lumbar and hypogastic regions. It is also characterized by mental depression, sexual weakness or impotence, extreme nervousness and inability to concentrate the mind.

It sometimes appears in young men who are subject to prolonged and ungratified sexual excitement, in which event it is usually cured by marriage. In cases of long standing there is, as a rule, marked atrophy of the testicle, caused by the interference in the circulation.

When the reflex symptoms are not pronounced and the nutrition of the part is not interfered with, the treatment consists of a proper regulation of the bowels, avoiding violent muscular exercise and long standing or walking. The daily application of cold douches to the skin over the dilated veins is an effectual palliative treatment, and will be greatly aided by the wearing of a suspensory so as to relieve the testicle of some of its weight.

In the more severe cases an operation is indicated, and if properly performed, its results are generally satisfactory.

## STRICTURE

Stricture is, perhaps, the most common complication of gonorrhea. It is caused by the inflammatory processes of gonorrhea in the anterior urethra, that is, the portion which commences just posterior to the peno-scrotal angle and extends forward to the meatus. The posterior urethra, if involved, is secondary to that of the anterior.

A stricture is a diminution in size of the calibre of the urethra and may be (a) soft, (b) semi-fibrous, or (c) densely fibrous. The soft stricture is the first to develop and usually ap-

pears in the bulbous portion of the urethra. At this stage the disease may be arrested, but if neglected it soon passes into the semi-fibrous stage. Here, also, it may be arrested with proper treatment, in the absence of which, a new and firmer growth of fibrous tissue is formed, producing an inelastic, gristly, scar-like tissue, which constitutes the most serious variety.

Chronic gonorrhea produces a growth of new cell elements which infiltrate the surrounding tissues, thus reducing the calibre of the urethra and by its inelasticity prevents its natural dilatation. In mild cases of stricture, only the mucous membrane and the tissues immediately underlying it are involved, while in the severe cases the cicatricial tissue penetrates the body of the penis, where the chord-like masses may be felt. Even a mild case of gonorrhea is followed, for a long time afterwards, by inflammatory processes, causing an outgrowth of unhealthy tissue, which differs from the normal tissue in being extremely inelastic, and may be compared to the sclerotic changes in an artery. The development is very slow and insidious, and may even remain dormant for years and later on become active. This is the cause of the strictures so commonly found in old men.

Strictures seldom develop before the twenty-fifth year, and between that period and the fiftieth year the greatest number of cases are found. They are extremely variable as to extent, according to the period of time which has elapsed since their development, as they grow more and more dense as the disease progresses, and consequently narrow the urinary passage more and more. A stricture may be annular, e. g., completely surround the tube, or it may

be in patches which have a tendency to spread along the tissues, and between these patches there may be a portion of the canal which is healthy. Nearly all strictures of long standing completely surround the urethral canal, and from thence travel along the tube.

Gonorrheal patients, even after they have been pronounced cured, should exercise constant care and watchfulness over the urinary apparatus, to see that a stricture is not allowed to develop. When the slightest disturbance manifests itself, seek a good physician at once and have the disease arrested in its incipency when the most good can be done.

The initial symptom is a gleety discharge of mucus from the meatus in the morning or at various times throughout the day. Then upon close observation it will be noticed that the stream of urine is narrower than usual, and may divide into two or three jets or have a screwshaped twist. In a long-established stricture there is constant escape of urine in drops so that the unfortunate man must wear a rubber receptacle in which to receive it. This is an extremely disagreeable condition not only to the patient but to all who come near him, as there is a constant urinous odor even if extreme care be exercised.

Sometimes other symptoms appear which, to an unobservant person, might pass unnoticed, e. g., straining to expel the urine, an uneasiness or pain in the perineum and penis, especially in the vicinity of the meatus.

With the advance of the disease the bladder becomes very irritable and the patient is obliged to arise frequently during the night to urinate, the act being accompanied with pain. Oftentimes the very first symptom of a stricture is retention of urine. The exciting cause of this

may be exposure to cold, indiscretions in diet or drink, or anything which acts as an irritant to the bladder or urethra, the predisposing cause being chronic gonorrhea.

Then there is the opposite condition, e. g., incontinence of urine, or the inability to retain it. This may occur in a very tight stricture where the canal is much reduced in caliber, the bladder in this condition never being completely emptied. Incontinence is due to a paralysis of the sphincter muscles, the function of which is to keep the neck of the bladder and the urethra closed until the person voluntarily urinates, as urination is by nature a voluntary act, being converted into an involuntary act by pathological conditions. The urine which is retained in the bladder becomes putrid and foul and causes inflammation of the bladder, which travels up the ureters to the kidneys and causes nephritis and other serious complications of the entire urinary tract.

This putrid urine may also penetrate and infiltrate the surrounding tissues in places where the mucous membrane has become pervious to disease. This is the beginning of an abscess which continues to burrow underneath the skin in the direction of least resistance and forms fistulæ, which eventually discharge their load of pus at some point on the surface. This is a very serious condition and should have immediate surgical aid, as it quickly causes blood poisoning, and necrosis and gangrene of tissues outside of the urinary passage, and becomes systemic. The urine continues to leak at the site of the break in the urethra, and by its decomposition arise the symptoms of uremic poisoning, such as nausea, vomiting, chills, coma and delirium, usually ending in death.

Abscess of the prostate sometimes follows

stricture. After the pus forms, there will be a throbbing pain at the neck of the bladder, and the pressure of the enlarged and inflamed prostate upon the urethra will prevent the free passage of urine. Extreme muscular force is, therefore, required to expel the contents of the bladder, which results in a hypertrophy of its walls. Large pouches form in the mucous membrane of the bladder which become filled with stagnant urine, the walls of the bladder become thinner and thinner from over-distention, and calculi, or stones, become lodged in the little crevices. If this distention is not arrested, the pouches burst and discharge their contents into the abdominal cavity, producing peritonitis and death. Sometimes, however, death occurs from extreme shock.

An important point to remember is, that even the mildest cases of clap are often followed by a stricture unless aborted by effective treatment. Another feature which should especially be borne in mind is, that strictures develop very slowly, and often do not make their appearance until many years after gonorrhea is apparently cured.

## SYPHILIS

Many theories have been advanced as to the age and origin of syphilis. Perhaps the most authentic work on the subject is that written by Dr. F. Buret, in which he claims that it was known more than five thousand years ago among the Egyptians, Greeks and Romans. He dwells at length upon the horrors of this dread disease, with which nearly every mature person is more or less familiar.

As a matter of history, however, it may be said that syphilis raged as an epidemic in Europe in 1494, about the time of the discovery

of the New World and marks a notable event in medical history. It was said to have been introduced into Europe from America by Christopher Columbus, but evidences proving its antiquity are conclusive, and the belief is now thoroughly established that syphilis is as old as man.

The European epidemic occurred at the time of the siege of Naples, when Charles VIII of France invaded Italy to obtain possession of the city of Naples. The disease suddenly attacked the troops that were encamped near Naples with such virulence, that within a few years it had spread over the greater part of Europe, and subsequently carried to all parts of the world.

At this time, whole families were destroyed or afflicted with loathsome eruptions or frightful deformities, as syphilis is especially malignant when it appears for the first time. Thus the present civilized races do not experience the diseases in its primitive virulence, as its first awful ravages were visited upon their ancestors.

There is a prehistoric spot at Solutre, in the department of Saone et Loire, where the skeleton of a woman was discovered with protuberances upon the tibia, which by Virchow and Parrot were pronounced syphilitic.

It has been proved that syphilis existed in Peru before the Spanish conquest, as traces of congenital syphilitic bone have been found in the skulls of Peruvian infants. According to Jourdanet in his history of syphilis in Mexico before the conquest, Captain Cook was of the opinion that it existed in Oceania.

Five thousand years ago, the Chinese understood syphilis and the venereal diseases better than they have been understood since, up to the

time of Ricord. In 1863 Dabry published his "La Médecine chez les Chinois," which gives us an insight into the extent of the knowledge possessed by the Chinese at that time. A quotation from Dabry's work is given by Buret as follows:

"It happens sometimes that, several months after the cure of a venereal sore, the individual suffers suddenly from headache, with fever, pains in the bones, and vertigo. A short time afterwards, small copper-red spots appear on the face, which increase gradually. The face becomes bloated, chiefly the nose; the speech becomes difficult; pain and itching of the throat. . . . These spots change to small purple nodules as large as peas, which discharge a thick and fetid liquid; the body soon becomes covered with spots and nodules of the same nature; mucus flows from the nose; the breath is foul. The nodules, once excoriated, increase in size."

The only evidence obtainable of syphilis among the Egyptians exists in the inscriptions on granite and on papyrus. Egypt was for a long time the center of debauchery, and it is entirely improbable that it should have escaped syphilis. Nothing, however, is authentic regarding its actual existence among the Egyptians, although bones have been found showing evidence of rickets and caries, perforations of the skull with lesions above the nasal bones, all of which bore strong evidence of tertiary syphilis.

Evidence of syphilis among the Hebrews is extremely vague, as biblical times are a matter of legend and history, more or less indefinite. According to Buret, however, the following quotation from the fifth chapter of Proverbs refers to syphilis:

"Remove thy way far from her, and come not nigh the door of her house, lest thou give thine honor unto others, and thy years unto the cruel . . . and thou mourn at last when thy flesh and thy body are consumed." In Leviticus we read that Moses prohibited prostitution, which resulted in the Hebrews going among the Midianite and Moabite girls, where they were initiated into the cult of Baal-Peor. This cult was the worship of a god whose temples were places of debauchery. The orgies here indulged in caused the plague of Baal-Peor, which was nothing more or less than syphilis. Baal-Peor corresponded to the Priapus of the Greeks and Romans, the Linga of India and the Phallus of the rest of Asia.

Syphilis among the Hindus in 1000 B. C. was extremely prevalent, the cult of Linga affording an ideal means for its propagation. Prominent among Hindu books is an ancient medical work called "Ayureveda," which has been translated into Latin. In this work, mention is made of gonorrhea, alopecia, chancre, cystitis, orchitis, fistula, tumors of the anus, etc., and these, according to Buret, were syphilis. Klein says that the treatment of syphilis with mercury was employed by the Hindus.

The worship of Priapus among the Greeks and Romans correspond to Baal-Peor among the Hebrews and Linga among the Hindus. Among these people also syphilis undoubtedly existed. It was disseminated by the custom which obtained among virgins, of offering their virginity to the god of Priapus before marriage. The custom also prevailed among maidens who were not virgins, and it is very reasonable to assume that the disease was spread in this way.

Hence, we see that all of the evidence to be obtained shows syphilis to be a disease of an-

tiquity. The debauches and orgies among the ancients were spoken of as fetes in honor of Venus, Bacchus, Baal-Peor, Phallus and Priapus. The diseases contracted during these debauches were extremely difficult to cure, and the victims prayed to their gods for relief.

Syphilis is a highly infectious disease and may be hereditary. Its initial lesion is a local sore or "chancre" which appears at the point of infection. It resembles the eruptive fevers such as smallpox, measles, scarlet fever, etc., in some respects, in that it has a period of incubation, invasion, eruption, persistence, decline and convalescence; also, one attack renders the patient practically immune. There are cases on record, however, where, after a lapse of several years, a second attack has occurred, the same as it does in contagious fevers. Syphilis has a long convalescent period, during which time there is a progressive degeneration of tissue, which causes functional and organic changes resulting in pronounced disorders of every kind.

The initial lesion is the result of inoculation of a specific virus from a syphilitic individual, an infinitely small quantity being sufficient to communicate the disease.

Recent experiments have proven that the organism which causes syphilis is a vegetable bacterium called "spirochaeta."

The awful devastation which this dread disease causes in the system is only beginning to be appreciated by even the more highly educated classes. The fear which has hitherto existed in the minds of the people regarding small pox would be far more appropriately reverted to syphilis (or "big-pox"), and if the same degree of caution were used against its contraction as is the custom with smallpox,

it would greatly aid in the control of the plague. The great trouble is that its hideous loathsomeness is entirely underestimated, and then again, it is especially common among the vicious, careless and ignorant, and they are free to mingle with the uncontaminated, spreading the contagion among people with a pure history.

A quarantine for syphilitics should be just as rigidly maintained, if not more so, than any other contagious disease. The syphilitic is a positive menace to the community in which he lives, and until the active stage is passed should be kept in strict seclusion.

Syphilis is usually acquired by impure sexual intercourse, though very many cases are acquired innocently. This is possible from an abrasion so slight as not to be noticeable. The virus may even penetrate a mucous membrane on which only the external layer of skin has been interrupted. The secretion from the primary lesion is highly infectious for two or three years, even under careful treatment. Any pustule or pimple which appears upon the face, mouth, lips, anus or external genitals will contaminate any article which it touches and render them unsafe. If one small blood corpuscle, or an exudate from broken down tissue within the body of a syphilitic should become mixed with sweat, tears, urine or any of the normal secretions, and should be brought in contact with an abrasion on another individual, infection would follow. Very many cases occur where the kisses of a prostitute who has the "mucous patches" of syphilis in her mouth or upon her lips, have produced the characteristic "hard chancre" of syphilis. It has also been imparted by careless physicians in handling their surgical instruments or in failure to properly sterilize them after an operation. A syphilitic

man may inoculate his wife or his innocent babe by a kiss. It is, indeed, a gaunt specter which stalks unseen in our midst, seeking whom it may devour. It lurks in drinking cups, towels, razors, cigars, candy, dental instruments, mouthpieces of telephones and even in the communion cup.

Three distinct stages are characteristic of syphilis, i. e., primary, secondary and tertiary.

*Primary Stage.* At the time of coitus or other contact, virus is deposited at the site where the initial lesion will develop. Then follows the stage of incubation, during which time there is no evidence of the infection. This period is twenty-one days, though it ranges from twenty-one to as high as seventy days. At first a pimple is noticed, which is soft in consistency, but at the end of ten or fourteen days becomes indurated, and the typical "hard chancre" of syphilis is established. The primary stage is terminated at the end of forty to ninety days thereafter, the only inconvenience being the local sore, not marked by any appreciable advance in the disease.

*Secondary Stage.* This is the period of invasion, when the pent-up forces seem to have gathered strength from the period of repose, and suddenly explode and become constitutional. These symptoms are manifested in headache, shooting pains in trunk and extremities, sore throat, falling out of hair (alopecia), eruptions on the skin, mucous patches in mouth or on lips, and enlargement of glands. These changes are all accompanied by neuralgic pains and fever, and are attended with great suffering, although the eruptions are mostly superficial, and do not exercise a profound influence upon the general health. These symptoms constitute the diagnostic features of the disease.

would be rendered obscure by anti-syphilitic treatment; they are, therefore, allowed to completely develop, and the diagnosis is then positive.

*Tertiary Stage.* In this stage the lesions are nearly all found in the deeper parts of the body, and usually develop at the expiration of about two years. The lesions cause caries of the bones, complications of the central nervous system and of the vital organs. The tertiary stage of syphilis corresponds with the period of convalescence in the eruptive fevers, but in syphilis the convalescent stage is prolonged throughout the remainder of life, if unmodified by treatment. The division between these three stages is not unusually sharply defined.

The pathological effect of the virus of syphilis is the formation of "granulation tissue" or "proud flesh." The cells which compose the substance of this tissue are proliferative, and as they increase in number they coalesce, forming a mass of new blood vessels and tissue. The growth of granulation tissue is the most active when the disease has become constitutional, i. e., in the secondary and tertiary stages. At this time the tumor is formed which is especially characteristic of syphilis, called "gumma." These gummata attack the vital organs and the central nervous system especially. They destroy the soft palate and leave a revolting deformity; paralyse of the eye and face; caries of bone, and a host of other loathsome conditions. Deaths from syphilis occur frequently, and may be caused by cirrhosis, lesions of the meninges, cerebral gummata, lesions of the spinal cord, affections of the kidney, larynx and lungs, consumption and extreme anemia. These are only a few of the conditions which the person who exposes himself to syphilis may expect.

Syphilis should never be allowed to run its course, but should be promptly treated so as to avoid the appearance of tertiary lesions, which, if untreated, may develop as late as forty or fifty years. Occasionally the tertiary lesions come on within a few months after infection and the attack is extremely acute. This is called "galloping syphilis," and it usually produces extremely grave complications or death. Tertiary lesions are, as a rule, slow in developing, but they are especially destructive to the deeper tissues, such as blood vessels, bones, viscera, spinal cord, heart, brain, etc.

In the late stage the gummata form, and after a time they ulcerate and necrose, causing cicatrices and sclerosis in the vital tissues. The dangers from loathsome skin affections are exceedingly great. Then sometimes the fauces, tonsils, and soft palate will be entirely destroyed, throwing the nasal cavity, pharynx and mouth into one, practically destroying articulate speech. It also attacks the vocal cords and injures the voice according to the extent of the damage. Sometimes it produces a huskiness which remains throughout life, and at others the voice is completely destroyed. In fact, there are no tissues of the body which may not be affected by this disease, and the horrors of malformations, paralyses, blindness and destruction of joints are liable to be visited upon its victim.

*The Hereditary Influence of Syphilis.*—Syphilis is essentially a hereditary disease from every point of view. Prenatal infection may occur from either the father or mother or from both. The influence of infection from the father is not as marked as from the mother, as his share in procreation is limited to the impregnation of the ovum. A syphilitic father

is liable to transmit infection to his offspring many years after apparent absence of its manifestations, especially if efficient treatment has not been applied.

After the mother has acquired the disease her child may be syphilitic if born before the expiration of six years, or a healthy foetus may become infected if the mother become syphilitic. The effects of syphilis upon the female organs are far more deleterious than upon the male; therefore the influence upon the foetus is greater if transmitted by the mother than if transmitted by the father, as after the formation of the placenta the child is nourished from the blood of the mother. Abortions are very common when the mother is syphilitic.

When syphilis is transmitted from both parents, the child is sure to be infected. Many die before birth, while nearly all die within six months after birth. The longer parents have had syphilis before the birth of offspring, the less liable is the transmission, while within the first year after infection is the most dangerous period in which to convey the disease.

The tendency in gonorrhea is, as we have seen, to cause sterility, while in syphilis it produces repeated abortions.

It was formerly supposed (and even now contended by some) that a foetus which has been infected by the semen of a syphilitic father cannot contaminate a healthy mother. Recent investigation, however, has established the belief that where there is a lesion or a solution of continuity on the placenta, the infection may be transmitted to the mother. This is the generally accepted theory, and indeed it is quite reasonable to assume that toxins from an infected foetus may be communicated to the

mother by means of an abrasion upon the placenta.

When either or both parents are tainted with syphilis, as already stated, repeated abortions are very probable, and at time of delivery the bony framework of the foetus will be softened by the disease. Occasionally children are born alive, but they are usually emaciated and deformed, with a peculiarly "old" expression, and will be absolutely permeated with the virus. Then, again, there may be no syphilitic signs at birth whatever, their appearance not being manifested until the time of second dentition, puberty or maturity.

The lesions which are liable to appear during the lifetime of such a child are similar to those which are characteristic of acquired syphilis. Among them are paralysis, epilepsy, blindness, deafness, hydrocephalus, tuberculosis and all kinds of deformities.

The length of time which should elapse after the initial chancre before a syphilitic should marry is five years. This is supposing he has had effectual treatment and has maintained a steady progress during the entire term. Even then, marriage should be deferred unless a year has elapsed without the appearance of secondary symptoms.

From the standpoint of wisdom and justice to the human race, syphilitics should never marry. Their children are always liable to be afflicted with some incurable lesion, and there can never be a glad and joyous confidence that its effects will not be manifested at some period in their lives.

Generally speaking, syphilitics, if they are intelligent, are a despondent, unhappy class of patients. The expression upon their faces is one of utter abandonment of hope and the pros-

pects of a joyless existence. Among the more frivolous there is a "devil-may-care" attitude which shows itself in all their acts, and impels them to selfishly seek all the pleasure obtainable out of life.

Syphilis should never be allowed to run its course, but prompt action should be taken to obtain the advice of the very best specialist in this line of diseases. The mercurial treatment is a very prolific cause of the complications of syphilis, of which locomotor ataxia stands among the most prominent and formidable sequelæ. Therefore seek a physician who does not saturate the system with a poison which frequently produces a lesion impossible to overcome.

Syphilis may be cured in three years if mercury has not been used, and if the proper elimination and sanative treatment is employed.

## ONANISM

Onanism is a term applied to all forms of sexual stimulation with the purpose of producing orgasm without coitus. There are various forms of this degrading and demoralizing practice, such as pederasty, bestiality and mutual masturbation, all of which are self-explanatory; but the most common form, and the one to which we will call special attention is self-pollution, or auto-sexual indulgence.

The causes which predispose to auto-sexual stimulation are often overlooked, and harsh and unjust criticism is passed upon the victim, when in reality there may be an abnormal condition of the genital organs which causes the irritating influence. It is an unnatural thing for children to masturbate before puberty, as up to that time they are neuters and the sexual desire has not matured; therefore, the ne-

cessity is great that parents exercise a careful supervision over them, and when indications make their appearance that the child is indulging in this practice, seek a good physician and have an examination made at once. The cause will nearly always be found in a too loose or too tight foreskin in boys or an adherent clitoris in girls. When the prepuce folds over the head of the penis, the smegma, or a cheese-like material, accumulates beneath it, and sets up an irritation which causes many children to handle their privates.

In illustration of this condition in young girls before the age of puberty, the writer has in mind a case which came under his notice. It was that of a young lady about twenty-four years of age, who had masturbated since she was six years old. She was a nervous wreck and on the verge of insanity. An examination was made, and the physician found an abnormally long and adherent clitoris, with which the slightest contact produced an erection similar to that in the penis of the male. The local irritation caused by this condition explained the cause of the habit formed in this instance, and in a measure exonerated the patient from responsibility. Thus it is never safe to pass a harsh criticism in these cases until the cause is determined. In this case an operation to free the clitoris was performed, and the patient placed on the road to recovery.

This is only one of the many cases which help to fill our insane asylums and cause untold suffering. In this particular instance, the demoralizing influence of many years of self-pollution were ineffaceably stamped upon the mind of this poor young woman. Even though she recover her normal physical health (which

is quite improbable), the evil impression of secrecy and shame is not easily effaced.

Among the evil and vicious, this practice is more often the result of influences and environment. The children of such parents are wholly untaught, and self-restraint and culture are unknown.

The age of puberty marks a very critical time in the life of every child. It is at this time that the sexual life is awakened and sexual desire becomes established as the foundation of future endeavor. It is the time when the passions have full sway over the individual if no self-control is exercised to hold them in abeyance; when lessons learned of vicious playmates are often retained throughout life. It is, therefore, the time when the greatest pains should be taken with the education of the child upon sexual matters.

Teach the child first of plants and flowers, and how their growth and development is similar to animal life. Teach them of the proper care of their bodies and its functions. Instil into their minds the harmful influence of perversions and uncleanness, and in later years they will reverence the parent who has carefully and thoughtfully prepared their minds for the pitfalls which are sure to be encountered sooner or later. Habits of idleness and disobedience, too long repose in bed, spicy foods, etc., predispose children to perversions.

In the adult, masturbation is usually accompanied by vivid mind pictures which tend to stimulate the passions. Then there is the type who finally arrives at a condition where the imagination is so abnormally excited and the physical excitation so great as to produce the orgasm without local friction. This is called "mental masturbation" and is produced by

highly colored mind pictures of lasciviousness.

Onanism is, without doubt, the most hideously demoralizing and degrading practice ever conceived, and its baneful influence upon the mental and moral character of the individual is greater than the most loathsome of diseases. It destroys the normal sexual feelings, causes impotence and renders one incapable of performing the sexual act. It produces an intense nervous shock to the system, inflames the passions and hyper-excites the sexual functions. It destroys the source from which pure love springs, and renders the victim solitary, morose and cowardly. It squanders the semen, the vital element of manhood, perverts the conscience, and weakens the mental strength of the individual and his power of concentration. Its indulgence in early years prevents the development of the sexual instinct and contaminates the source of all ideal sentiments. It blights the unfolding bud of love and beauty and converts it into coarse animal desire, and if the victim reaches maturity, he is wanting in that pure and free impulse which is the attraction between opposite sexes. Finally he loses his desire for the opposite sex entirely and becomes solitary and morose.

It has been stated by some that onanism is no more harmful than intercourse if indulged in only occasionally. From a physical standpoint this may be true, but the mental and moral influence is most degrading, and robs the individual of that vitality and energy which is his greatest charm.

Not all who practice masturbation sink to the lowest depths, however, for there are thousands who indulge in it to some extent. The tendency in all cases is for the habit to obtain mastery over the individual, and anything

whatever which we allow to dominate over us is most harmful.

How often do we hear people say they cannot get along without a certain thing? It may be an article of diet, tea, coffee, or alcoholic drinks. Or it may be some habit formed which they know to be harmful, and yet cannot seem to overcome.

If we would only stop a moment and think what such an admission as this means! It means that we are slaves to the thing we cannot do without. It means that the habit has the mastery and control over our mental and moral character, and that we are no longer capable of doing as we wish. On the contrary, how we admire a person who can say, "There is absolutely no one thing I cannot do without," and whose life bears out this statement. What a freedom and strength of character it gives him! Mental and moral character is a priceless treasure to the possessor, and is a powerful weapon of defense in battling with the world, as we are all liable to be called upon to do, sooner or later.

"Conjugal onanism," or withdrawal immediately after the orgasm, is practiced very extensively within the marriage relation, by people who are entirely innocent of its being followed by harm. It is, however, a form of mutual masturbation, and its effects upon the female generative organs are decidedly harmful, as it causes prolapsus of the uterus and various other disorders. Aside from this the deposition of semen into the vagina exercises a beneficial influence upon the female organs, especially if the man be a strong, vigorous and healthy one.

No child is free from sensual danger, no ~~mat-~~ter how pure the blood of its ancestors. Each

individual inherits a sexual instinct of its own, and it must be carefully watched and guarded from danger and perversion, and it is only the part of wisdom to recognize that all flesh is susceptible to contamination and evil influences.

However strong an influence heredity has upon the child, it can in no way be compared to that of environment and example. Evil tendencies may nearly always be overcome by directing the child in the right paths and giving them occupations which will create in them healthy minds and sound bodies, as well as teaching them to be useful. The upbuilding of the character of the child is more surely accomplished by repeated suggestions and worthy example than any other way. Suggestion makes an impression of good or evil upon the youthful mind when it is in its most receptive state. If good suggestions are made, the cerebral impression will be good, and vice-versa. Show them the right way, ignore their faults as much as possible, and do not hold them up to others in an unfavorable light.

Children are imitators and will just as easily imitate the good as the bad; therefore never do or say anything in their presence which you would not wish them to do or say. They will even go beyond an evil example and fall a prey to influences of depravity.

It does not in the least detract from a child's purity to know the things he should know for his own protection. On the contrary, it is the most essential part of his education. Children have no definite comprehension of wrong when they first begin to handle their private parts, and later, when their passions become aroused, they do not then know the terrible consequences of self-abuse. Why, then, should they

not know and be counseled in these most important matters? The acme of the higher education is to become self-masterful, self-respecting and self-controlled, and this cannot be begun at too early a period in a child's life. **SELF-CONTROL IS THE KEY TO ALL MENTAL ATTAINMENT.**

No medicinal treatment for the effects of masturbation would ever be required if the proper precautionary measures were adopted. Indeed, they are of secondary importance and of little use unless the practice is discontinued. In boys, circumcision offers a positive cure where the habit is formed from a local irritation caused by a too tight or redundant foreskin. In girls, an operation to free the clitoris is effective. The digestive disturbances, heart difficulty, hyper-excitability of the nervous system, and all the other characteristic symptoms of this vice, will all disappear with the abandonment of the practice.

### THE CONSEQUENCES OF IMMORALITY

Self-preservation is admittedly the first law of life, the strongest of all instincts. The second strongest, and following closely in its lead, is the sexual instinct, which is deeply stamped upon every normal individual of both sexes. It is the foundation upon which homes are established, and insures the development of families and the perpetuation of the race. Sexuality is also the foundation of the stimulating impressions of health, beauty and all artificial means of attraction. Around the sexual life as the magnetic center are drawn feelings of admiration, self-esteem, love of approbation, and in fact love in all its forms, a discussion of which would fill volumes without being able to analyze it in all its breadth and beauty.

## VENEREAL DISEASES

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Properly controlled, sexuality is the instinct which uplifts society and mankind to its highest and noblest possibilities by its purifying influence; but if not properly subjugated, it will drag its victims down to the depths of infamy and bring ruin and suffering upon all who come under its influence.

Ignorance in regard to sexual hygiene and conduct is no longer excusable in the light of the rapid progress of the higher education and advancement along sanitary and hygienic lines. And with this progress is the recognition that knowledge is the foundation upon which happiness, morality, the stability of the state, and the noble attributes of mind and heart most securely rest.

The opportunities of the physician for gaining an insight into the real situation regarding this great sexual problem are ideal. He is not only the medical adviser but the confidant of his patients. In truth, confidence in your physician in every way is necessary for intelligent and effective service, inasmuch as the bodily health is affected by all troublesome conditions in the conjugal relation. Here is where sexuality towers mountain high above all other difficulties, and is without doubt the most important question which confronts our social life at the present day. The homes wrecked by its devastating influence are impossible, almost, of conception. Probably nine-tenths of the unhappiness and suffering in the world has its origin in the sexual relation.

During a practice of thirty-five years as a specialist in venereal diseases, the writer has had this point illustrated to him very forcibly, and has seen something of the misery and suffering resulting from misspent lives which is often visited upon the innocent.

One instance of great mental and physical suffering caused by gonorrhea is that of a very estimable young lady, with high and beautiful ideals, who became attached to an apparently upright and conscientious young man, whose intellectuality was of a high order. To their friends and to all outward appearances they were an ideal couple. The man was prosperous, they loved each other devotedly, and apparently had everything to make life worth living. After a short courtship they were married. In a short time the wife noticed that the discharge which she had had since puberty between the menstrual periods, seemed a trifle more than usual and caused a greater local irritation than she had heretofore experienced. However it was not so pronounced as to create any suspicion in her mind that all was not right, and she accordingly did not seek medical advice. So the days and weeks passed on and the disease was gradually working its way to the internal sexual organs and into the peritoneal tissue; at the same time the outward change was becoming more manifest. The discharge was muco-purulent in character, and the inflammation of the external genitals was pronounced. She then sought medical advice and was informed that she had an acute attack of gonorrhea. The delay in seeking advice had allowed the disease to spread to the uterus, Fallopian tubes, ovaries and peritoneum. Her physical suffering was intense, but perhaps easier to bear than the shock to her nervous system caused by her disappointment in the one in whom she had absolute confidence, and whom she loved devotedly. It was truly pitiful, as she was of a highly sensitive temperament. She rapidly developed a purulent peritonitis, from the agonies of which death soon released her.

Here was a case of a bright, intellectual young woman, with a absolutely pure history, married with all the accompaniments of a perfect wedding celebration, and the brightest prospects of future happiness.

Investigation developed the fact that the husband had been pronounced cured of an acute attack of gonorrhea. The disease had disappeared from the surface, but instead of being cured, it had extended to the deeper tissues, as is so often the case, and was apparently dormant. The free exercise of the sexual functions during the first few months of married life set up an irritation which again brought the disease into evidence, with the result outlined above.

Another case of which the writer had personal knowledge was that of a lady with an idealistic temperament and a great admirer of purity in all its phases, who married a man who seemed to fulfil all the requirements of her loftiest concepts. Both were especially fond of children, and looked forward with eagerness to parental joys, but as the months and years rolled by and no children gladdened their hearts and home, they decided to consult a physician to ascertain the cause. Consequently, the husband came into my office one day, and during the course of conversation mentioned that at one time he had been afflicted with syphilis, but thought himself cured.

The physician whom he had consulted at that time was a skilful one, as no traces of the disease remained, but upon examination of the semen, no spermatozoa were present. This effectually solved the problem of sterility, but disappointment and gloom enshrouded their little home until the husband, at the end of four years, became despondent and died of a

broken heart. In the course of a few years the widow became acquainted with a man whom she felt that she could absolutely depend upon. He was so pure in mind and heart that he had reached the age of thirty-five years without sexual intercourse. Here was the very man she had been looking for—the one who could fulfil all her heart's fondest hopes—and so they were married. Her hopes and dreams were soon scattered to the four winds, for he was absolutely impotent as a result of mental masturbation. He felt that intercourse without marriage would be wrong and refrained from mechanical masturbation, but years of practice enabled him to form mind pictures of scenes and incidents which brought on sexual excitement, and the physical influence was such that it produced the orgasm. The mental excitement and shock to the nervous system is so extreme in this form of sexual gratification that the system is unable to stand the strain, and complete sexual debility is the result. It is, without question, the most harmful of sexual indulgences.

Thus homes are constantly being wrecked, hearts are wrung with sorrow, and this physical body, which has been given to us for a short time to care for, is neglected and abused. If we could only see the suffering ahead of us, rather than the pleasure of the moment, much of the ill-health and suffering would be prevented. However, we are each arbiters of our own destiny, and must reap the fruits of what we have sown. No one can live our lives for us, and each individual must decide for himself. But after the "wild oats" are all sown and the harvest is ended, we think there is not one who will say it was worth the while.

Our only hope for the future is an education

of the people which will be deep, thorough, and far-reaching in its effects. No superficial wave of enthusiasm can be of avail. It must be a strong, steady, and never-ceasing diligence on the part of those who see and feel its need. It need not be confined to any profession or calling. But each individual should exert his influence in his own particular sphere. If this were done, the foundation would be established for the greatest of all educations and health movements, the minds of the youth would be guided in the right direction, and many of the dangers attendant upon puberty would be overcome. Much has already been done in this direction, and as civilization advances, conditions are bound to improve in this field of work, as in all others. Constant vigilance, however, should be our watchword, that we may seize every opportunity each day to lend our aid in this direction.

## VENEREAL WARTS

This name is applied to growths upon the genitals and in the genital region, although, strictly speaking, the title is a misnomer. As a rule, however, they are the result of the outpouring of venereal secretions upon a delicate membrane, gonorrheal or syphilitic, although the lesions may spring from uncleanness, warmth and moisture, especially in individuals who have an inherited tendency to papillary and warty growths. They are sometimes found bordering on the vulva of pregnant women, due, evidently, to putrid and irritating discharges.

In the male, they usually spring from the sulcus back of the glans penis, the inner surface and margin of the prepuce, and sometimes in the urethra and in the region of the fraenum. They may also appear on any portion of the

penis, scrotum, anus, thighs and perineum. In the female, they are usually above the vulva, over the perineum and anus, and sometimes within the vagina.

Pathologically, they are due to hypertrophy of the papillary and mucous layers of the skin, there being also a development of blood-vessels. On mucus surfaces they are moist, but on the skin—i. e., the penis, scrotum or thigh—they are dry. They are usually multiple, varying in size from a single filiform projection to an aggregation of these protuberances equal in size to a hen's egg, or even larger, and may almost cover the external genitals and the neighboring region in patches. The larger ones are pedunculated, but the individual papillæ are usually rounded, flattened or club-shaped. When on the skin, they are dry and firm, and partake largely of the color of the normal skin. On the mucous surface, they are softer, of a pinkish color, and covered with a purulent mucus with a very offensive odor. The large pedunculated masses form irregular-shaped growths resembling a cauliflower or a cock's comb. Papillary epithelioma may be distinguished from a venereal wart by its indurated base and border of cancerous growth, its slow development and its tendency to form ulcers, also the infrequency with which it appears before the fortieth year.

The cause of venereal warts is nearly always traceable to irritation incident to contact with inflammatory discharges. Therefore, in the uncleanly and in those suffering from gonorrhea, herpes, chancroid, etc., papillary outgrowths are very common. An important predisposing cause is a redundant foreskin. It has never been proven that the discharge from venereal warts is contagious, though condylomata frequently develop as a result.

Venereal warts are comparatively rare after middle life, and if a wart makes its appearance upon the sexual organs of an old person, it should be regarded with suspicion, as malignant growths are common in advanced age. It may, however, have the characteristic appearance of a venereal wart. A case of this kind should have an early microscopical examination by taking a section of the outgrowth and placing it under a high power lens. Only in this way can a positive opinion be given.

If kept clean and protected from irritation. Venereal warts will disappear spontaneously, though the length of time before their disappearance is a matter that cannot be predicted with safety. They sometimes ulcerate, if entirely neglected, and in rare cases form the starting point of cancer.

In the treatment of venereal warts, cleanliness is of primary importance. In many cases, if an antiseptic powder is dusted into the affected parts immediately after a thorough cleansing, the growths will gradually shrivel and disappear. The persistent pedunculated masses should be clipped with the scissors or curette and the base cauterized, then keep perfectly clean and cover with iodoform, and a cure is assured.

## HERPES PROGENITALIS

This affection is not always of venereal origin, but often follows local irritation or inflammation caused by venereal diseases. A long, tight foreskin or a rheumatic or gouty diathesis are predisposing causes of herpes.

The initial symptoms are little pin-head vesicles with an inflamed base, which may appear on any portion of the genitals and the surrounding skin in both sexes. It is, however, much

more common in the male sex, when it is most frequently found upon the inner surface of the prepuce or on the glans penis. In the female, it is usually upon the clitoris, inner surface of the labia majora, and upon the labia minora. The eruption is nearly always preceded by itching, burning or prickling sensations. When situated on the mucous membrane, these vesicles rupture in a few hours, discharging a clear fluid, and, if unirritated, heal in two or three days. If on the integument, they form little crusts, which remain a few days. Cleanliness is essential in order to check the appearance of other groups of vesicles. If the lesions be irritated by coitus or severe treatment, balanitis is very liable to result, accompanied by ulceration.

One attack of this troublesome disease predisposes to others. They often reappear periodically for months or even years. Not infrequently their persistency leads to a syphilitic diagnosis, and the deluded victim is placed under specific treatment for long intervals. To differentiate from beginning chancroid, cleanse the parts and keep them covered with iodoform. Under this treatment, heptic ulcers will at once begin to improve, and in a few days be entirely healed, while a chancroid would show little change.

Recurrence of herpes may be avoided by improvement of the general health, cleanliness and hygienic living, abstinence from alcohol, tobacco and highly seasoned food. In stubborn cases, the surface of the glans may be hardened by tannic acid, either in powder, or in solution of water and alcohol.



